

# MEMO

**TO: CCLS Clients**

**FROM: CCLS – Specimen Referral Center**

**DATE: April 23, 2021**

**SUBJECT: Supersaturation Profile, 24 Hour, Urine**

Effective April 29th, 2021, Mayo will be making changes to the following test:

***Supersaturation Profile, 24 Hour, Urine, MAYO CODE SAT24 (LAB1384)***

The reference values will be updated as shown below:

Current Reference Value	New Reference Value
<p><b>SUPERSATURATION REFERENCE MEANS</b> (Delta G: DG) Calcium oxalate: 1.77 DG Brushite: 0.21 DG Hydroxyapatite: 3.96 DG Uric acid: 1.04 DG Sodium urate: 1.76 DG</p> <p><b>INDIVIDUAL URINE ANALYTES</b></p> <p><b>OSMOLALITY</b> 0-11 months: 50-750 mOsm/kg &gt; or =12 months: 150-1,150 mOsm/kg</p> <p><b>pH</b> 4.5-8.0</p> <p><b>ALL REFERENCE RANGES BELOW ARE BASED ON 24-HOUR COLLECTIONS.</b></p> <p><b>SODIUM</b> 41-227 mmol/24 hours Reference values have not been established for patients &lt;16 years of age.</p> <p><b>POTASSIUM</b> 17-77 mmol/24 hours Reference values have not been established for patients &lt;16 years of age.</p> <p><b>CALCIUM</b> Males: &lt;250 mg/24 hours Females: &lt;200 mg/24 hours</p>	<p><b>SUPERSATURATION REFERENCE MEANS</b> (Delta G: DG) Calcium oxalate: 1.77 DG Brushite: 0.21 DG Hydroxyapatite: 3.96 DG Uric acid: 1.04 DG Sodium urate: 1.76 DG</p> <p><b>INDIVIDUAL URINE ANALYTES</b></p> <p><b>OSMOLALITY</b> 0-11 months: 50-750 mOsm/kg &gt; or =12 months: 150-1,150 mOsm/kg</p> <p><b>pH</b> 4.5-8.0</p> <p><b>ALL REFERENCE RANGES BELOW ARE BASED ON 24-HOUR COLLECTIONS.</b></p> <p><b>SODIUM</b> &gt; or =18 years: 22-328 mmol/24h Reference values have not been established for patients who are less than 18 years of age.</p> <p><b>POTASSIUM</b> &gt; or =18 years: 16-105 mmol/24h Reference values have not been established for patients who are less than 18 years of age.</p> <p><b>CALCIUM</b> Males: &lt;250 mg/24 hours Females: &lt;200 mg/24 hours</p>

Reference values have not been established for patients <18 years and >83 years of age

**MAGNESIUM**

51-269 mg/24 hours

Reference values have not been established for patients <18 years and >83 years of age

**CHLORIDE**

40-224 mmol/24 hours

Reference values have not been established for patients <16 years of age.

**PHOSPHORUS**

<1,100 mg/24 hours

**SULFATE**

7-47 mmol/24 hours

**CITRATE EXCRETION**

0-19 years: not established

20 years: 150-1,191 mg/24 hours

21 years: 157-1,191 mg/24 hours

22 years: 164-1,191 mg/24 hours

23 years: 171-1,191 mg/24 hours

24 years: 178-1,191 mg/24 hours

25 years: 186-1,191 mg/24 hours

26 years: 193-1,191 mg/24 hours

27 years: 200-1,191 mg/24 hours

28 years: 207-1,191 mg/24 hours

29 years: 214-1,191 mg/24 hours

30 years: 221-1,191 mg/24 hours

31 years: 228-1,191 mg/24 hours

32 years: 235-1,191 mg/24 hours

33 years: 242-1,191 mg/24 hours

34 years: 250-1,191 mg/24 hours

35 years: 257-1,191 mg/24 hours

36 years: 264-1,191 mg/24 hours

37 years: 271-1,191 mg/24 hours

38 years: 278-1,191 mg/24 hours

39 years: 285-1,191 mg/24 hours

40 years: 292-1,191 mg/24 hours

41 years: 299-1,191 mg/24 hours

42 years: 306-1,191 mg/24 hours

43 years: 314-1,191 mg/24 hours

44 years: 321-1,191 mg/24 hours

45 years: 328-1,191 mg/24 hours

46 years: 335-1,191 mg/24 hours

47 years: 342-1,191 mg/24 hours

48 years: 349-1,191 mg/24 hours

49 years: 356-1,191 mg/24 hours

50 years: 363-1,191 mg/24 hours

51 years: 370-1,191 mg/24 hours

52 years: 378-1,191 mg/24 hours

53 years: 385-1,191 mg/24 hours

54 years: 392-1,191 mg/24 hours

55 years: 399-1,191 mg/24 hours

56 years: 406-1,191 mg/24 hours

57 years: 413-1,191 mg/24 hours

58 years: 420-1,191 mg/24 hours

Reference values have not been established for patients who are less than 18 years of age.

**MAGNESIUM**

> or =18 years: 51-269 mg/24 hours

Reference values have not been established for patients who are less than 18 years of age.

**CHLORIDE**

> or =18 years: 34-286 mmol/24h

Reference values have not been established for patients who are less than 18 years of age.

**PHOSPHORUS**

> or =18 years: 226-1,797 mg/24hours

Reference values have not been established for patients who are less than 18 years of age.

**SULFATE**

7-47 mmol/24 hours

**CITRATE EXCRETION**

0-19 years: not established

20 years: 150-1,191 mg/24 hours

21 years: 157-1,191 mg/24 hours

22 years: 164-1,191 mg/24 hours

23 years: 171-1,191 mg/24 hours

24 years: 178-1,191 mg/24 hours

25 years: 186-1,191 mg/24 hours

26 years: 193-1,191 mg/24 hours

27 years: 200-1,191 mg/24 hours

28 years: 207-1,191 mg/24 hours

29 years: 214-1,191 mg/24 hours

30 years: 221-1,191 mg/24 hours

31 years: 228-1,191 mg/24 hours

32 years: 235-1,191 mg/24 hours

33 years: 242-1,191 mg/24 hours

34 years: 250-1,191 mg/24 hours

35 years: 257-1,191 mg/24 hours

36 years: 264-1,191 mg/24 hours

37 years: 271-1,191 mg/24 hours

38 years: 278-1,191 mg/24 hours

39 years: 285-1,191 mg/24 hours

40 years: 292-1,191 mg/24 hours

41 years: 299-1,191 mg/24 hours

42 years: 306-1,191 mg/24 hours

43 years: 314-1,191 mg/24 hours

44 years: 321-1,191 mg/24 hours

45 years: 328-1,191 mg/24 hours

46 years: 335-1,191 mg/24 hours

47 years: 342-1,191 mg/24 hours

48 years: 349-1,191 mg/24 hours

49 years: 356-1,191 mg/24 hours

50 years: 363-1,191 mg/24 hours

51 years: 370-1,191 mg/24 hours

52 years: 378-1,191 mg/24 hours

53 years: 385-1,191 mg/24 hours

54 years: 392-1,191 mg/24 hours

55 years: 399-1,191 mg/24 hours

56 years: 406-1,191 mg/24 hours

59 years: 427-1,191 mg/24 hours  
60 years: 434-1,191 mg/24 hours  
>60 years: not established

**OXALATE**  
0.11-0.46 mmol/24 hours

**URIC ACID**  
Diet-dependent: <750 mg/24 hours

**CREATININE**  
Normal values mg per 24 hours:  
Males: 955-2936 mg/24 hours  
Females: 601-1689 mg/24 hours  
Reference ranges for male and female patients  
<18 and >83 years of age have not been  
established.

The expected urine creatinine excretion per 24  
hours:  
Males: 13-29 mg/kg of body weight/24 hours  
Females: 9-26 mg/kg of body weight/24 hours

Reference ranges for male and female patients  
<18 and >83 years of age have not been  
established.  
Note: To convert to mg/kg of body weight/24 hours,  
divide the mg/24 hours result by body weight in kg.

**AMMONIUM**  
15-56 mmol/24 hour  
Reference values have not been established for  
patients <18 years and >77 years of age.

**UREA NITROGEN**  
5.0-16.0 g/24 hours

**PROTEIN CATABOLIC RATE**  
56-125 g/24 hours

57 years: 413-1,191 mg/24 hours  
58 years: 420-1,191 mg/24 hours  
59 years: 427-1,191 mg/24 hours  
60 years: 434-1,191 mg/24 hours  
>60 years: not established

**OXALATE**  
0.11-0.46 mmol/24 hours  
9.7-40.5 mg/24 h

**URIC ACID**  
Male: > or =18 years: 200-1,000 mg/24h  
Female: > or =18 years: 250-750 mg/24h  
Reference values have not been established for  
patients who are less than 18 years of age.

**CREATININE**  
Male: > or =18 years: 930-2,955 mg/24h  
Female: > or =18 years: 603-1,783 mg/24h  
Reference values have not been established for  
patients who are less than 18 years of age.

**AMMONIUM**  
15-56 mmol/24 hour  
Reference values have not been established for  
patients <18 years and >77 years of age.

**UREA NITROGEN**  
> or =18 years: 7-42 g/24h  
Reference values have not been established for  
patients who are less than 18 years of age.

**PROTEIN CATABOLIC RATE**  
56-125 g/24 hours

Please feel free to contact the Specimen Referrals Center with any questions at 320-251-2700 Ext. 57320